

AGNIBHO ROY

UNIVERSITY OF CALIFORNIA AT BERKELEY

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EDUCATION

University of California, Berkeley • GPA: 3.80/4.00 (Technical: 3.87)	Fall 2018 - May 2022
<ul style="list-style-type: none">- B.S. Electrical Engineering & Computer Science (EECS)- B.S. Business Administration- Highlighted Coursework: Efficient Algorithms, Data Structures, Discrete Math & Probability, Stochastic Processes, Principles of Data Science, Machine Learning, Optimization, Operating Systems, Computer Architecture, Finance- Honors and Societies: Tau Beta Pi (TBP), Sigma Alpha Epsilon (SAE)	

WORK AND RESEARCH EXPERIENCE

Royal Bank of Canada QUANTITATIVE TRADING AND RESEARCH INTERN	June 2020 - Aug 2020
<ul style="list-style-type: none">- Worked with the global equity algorithmic trading team as part of the Quantitative Research Group	
Fidelity investments SOFTWARE ENGINEERING INTERN	May 2019 - Aug 2019
<ul style="list-style-type: none">- Improved file transfer pipeline and back-end functionality of e-processing trade documents and added Secure Encryption of cookies.- implemented PL/SQL procedures for trade transaction maintenance for the Alternative Investments Team Internal Application.	
PenPath LLC DATA ENGINEER	Jan 2019 - May 2019
<ul style="list-style-type: none">- Performed feature engineering & supervised learning on client data to analyze & visualize trends in key marketing features.- Implemented predictive models using classification, xgboost, & recursive neural networks techniques to forecast client performance.	
Massachusetts Institute of Technology RESEARCH INTERN	Jun 2017 - Aug 2017
<ul style="list-style-type: none">- Worked under Professor Jagadeesh Moodera in the MIT physics department, studying condensed-matter Physics and thin films.- Developed & programmed novel method of modulation doping of Vanadium to improve Curie temperature in topological insulators.	

TEACHING AND LEADERSHIP

Berkeley EECS Department COURSE READER(2X), UNDERGRADUATE STUDENT INSTRUCTOR(2X)	Aug 2019 - Present
<ul style="list-style-type: none">- CS70 Reader (FA19, SP20), CS70 uGSI (SU20), DATA100 uGSI (FA20)- Graded work, proctored exams, hosted office hours, created assignment rubrics, taught weekly sections (30+ students), published content (on my website) for CS70 - Discrete Math and Prob. Theory and DATA100 - Data Science Principles & Techniques	
Computer Science Mentors (CSM) TEACHING MENTOR(4X), CONTENT MENTOR(1X)	Aug 2019 - Present
<ul style="list-style-type: none">- CS88 Teaching Mentor (SP19), CS70 Teaching Mentor (FA19, SP20, FA20), CS70 Content Mentor (FA20)- Teaching and creating weekly content for discussion sessions to an teaching organization serving over 1600+ students in CS70 and CS88 - Computational Structures in Data Science	
Aurora Consulting DIRECTOR OF FINANCE	Aug 2018 - Dec 2019
<ul style="list-style-type: none">- Developing Berkeley's first financial engineering consulting organization, establishing client relationships- Creating curriculum framework in financial engineering, modeling, analytics, etc. for new club recruits in the fall	

PERSONAL PROJECTS

Epidemia Python, Stochastic Modeling, Flask	Summer 2020 - Present
<ul style="list-style-type: none">- Created and trained a stochastic differential equation model of COVID-19 with probabilistic parameters and county-level diffusion- Building an application overlaid on maps to determine risk of travel to different locations in the future	
Rias Python, graphs API, Gtk Widgets	Summer 2019 - Present
<ul style="list-style-type: none">- Built cellular automata movement in multiple dimensions using graph state transfer in Python.- Simulated microorganism movement under alternative energy transfer laws & expanded on of Conway's Game of Life.	

AWARDS

Google Cloud Platform	Diversatech GCP Consulting Competition	Event Finalist
Business Professionals of America	Financial Analyst Team Competition	National Champion
Math Association of America	American Mathematics Competition	Distinguished Honor Roll (3-Time)
Coppell ISD	Class Rank	Valedictorian

SKILLS AND INTERESTS

Programming Languages	Python, Java, C, X86/RISC, Q, Scheme, SQL, PL/SQL, AngularJS, C#
Libraries and Software	Git, Pandas, numpy, matplotlib, Jupyter, Seaborn, xgboost, BeautifulSoup
Frameworks and DB	KDB, PostgreSQL, BigQuery, Django, Flask, ASP.NET, HTML/CSS
Languages	English (Native) Bengali, Hindi (Proficient) Spanish (Limited)